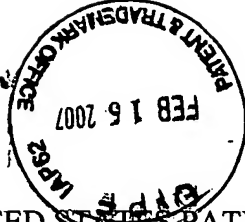
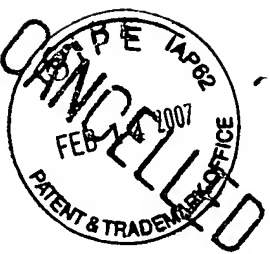


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Attorney's Docket No.: 08935-282001/M-5013/Z-03482



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant : William Bowden et al.  
Serial No. : 10/648,801  
Filed : August 27, 2003  
Title : PRIMARY LITHIUM BATTERY

Art Unit : 1745  
Examiner : Raymond Alejandro  
Conf. No. : 3936

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REPLY BRIEF

Applicants are responding to the Examiner's Answer.

The Examiner contends that the specification "fails to provide specific direction for ascertaining the definition, scope, and implication of the terms 'mixture' and 'blend'." See Examiner's Answer at 10. Based on this, the Examiner interprets a "mixture" and "blend" of carbon fluoride and lithiated manganese dioxide sufficiently broad to encompass, for example, a cathode including a first layer including carbon fluoride and a second layer including lithiated manganese dioxide.

But the specification does provide specific "direction" concerning the meaning of mixture, in particular, and the Examiner's boundless interpretation of mixture is inconsistent with that direction. For the convenience of the Board, applicants will walk through the specific guidance provided in the specification.

Applicants provide an example of a battery covered by claim 25 in Figure 1:

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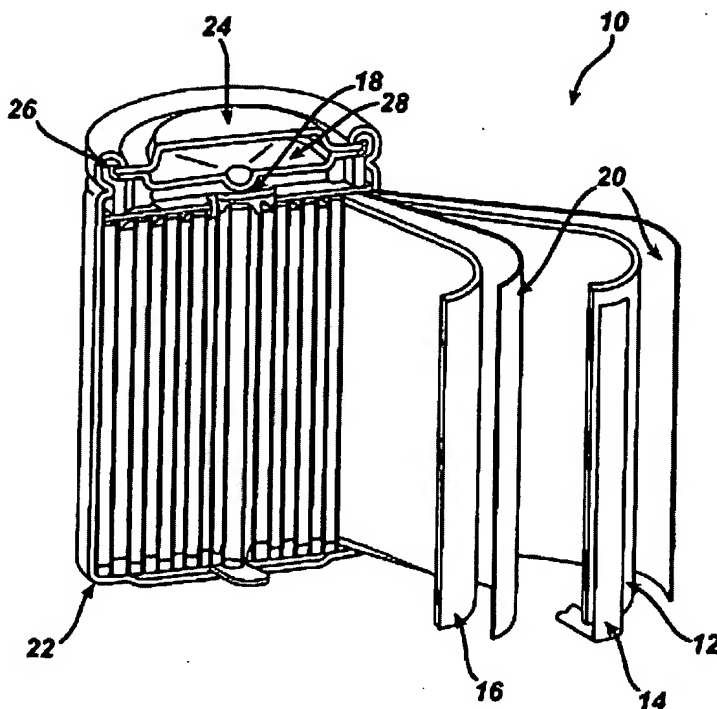
I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

February 13, 2007

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Sherry L. Hunt  
Typed or Printed Name of Person Signing Certificate

**FIG. 1**



Primary lithium battery 10 includes a cathode 16. As is apparent from Figure 1, cathode 16 is a single layer.

Applicants later provide examples of compositions used in cathode 16 (page 11 of specification):

Lithium cells containing a cathode mixture of 60% active material, 30% graphite conductive diluent and 10% poly(tetrafluoroethylene) binder were prepared. The cathode active materials tested were  $CF_x$ , heat treated EMD, lithiated manganese dioxide (LiMD), a 50:50 mixture (by weight) of  $CF_x$  and heat treated EMD, or a 50:50 mixture (by weight) of  $CF_x$  and lithiated manganese dioxide.

There are five cathodes compositions discussed in this quoted passage. One of the compositions includes a carbon fluoride ( $CF_x$ ) and lithiated manganese dioxide and is within the scope of claim 25; the others are comparative examples.

Significantly, the examples refer to a "cathode mixture" including the "active material," a "conductive diluent," and a "binder." The binder is present to hold (bind) the other components together. The "active materials" listed include a 50:50 mixture (by weight) of  $CF_x$  and lithiated manganese dioxide." Plainly, and consistent with the unitary cathode 16 illustrated in Figure 1, the cathode "mixture" is a physical mixture of the components.

An Examiner, in interpreting claim language during prosecution, can adopt "the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." In re Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997). The Examiner's interpretation of "mixture" is not reasonable because it is not consistent with the specification.

Applicants focused this appeal on claim 25 because that claim also states that "the lithiated manganese dioxide and the carbon fluoride are blended." The Examiner at one point appears to contend that this is a product-by-process limitation that does not count as a claim limitation for purposes of distinguishing the prior art. See Examiner's Answer at 5. But blending is simply a way of providing a physical mixture of materials. Thus, the "the lithiated manganese dioxide and the carbon fluoride are blended" limitation further supports applicant's interpretation of "mixture."

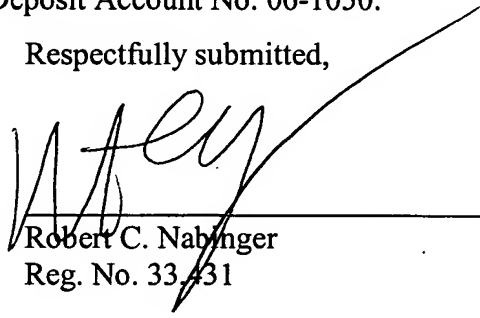
The 35 U.S.C. § 102 rejection should be reversed for the reasons explained in the Brief on Appeal.

For these reasons, and the reasons stated in the Appeal Brief, Applicant submits that the final rejection should be reversed.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: February 13, 2007

  
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